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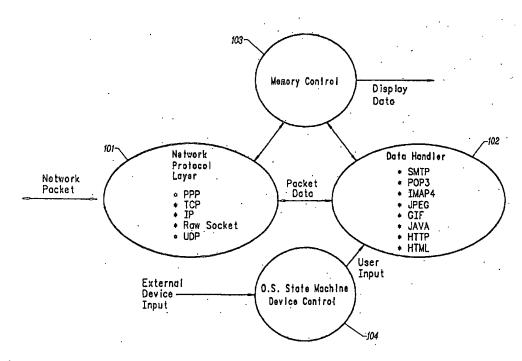
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[Continued on next page]

(54) Title: GIGABIT ETHERNET ADAPTER



(57) Abstract: An apparatus for decoding and encoding network protocols and processing data, consists of a network stack (101) for receiving and transmitting packets and for encoding and decoding the packets, and a plurality of dedicated hardwired logic protocol modules (102, 103 and 104), each being optimized for a spesific network protocol, wherein the protocol modules (102, 103 and 104) execute in parallel.



2/086674 43



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

## INTERNATIONAL SEARCH REPORT

International application No.

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Minimum documentation searched (classification system followed by classification symbols)  U.S.: Please See Continuation Sheet  Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched NONE  Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  Please See Continuation Sheet  C. DOCUMENTS CONSIDERED TO BE RELEVANT  Category*  Citation of document, with indication, where appropriate, of the relevant passages  Relevant to claim No.  Y  US 6,046,980 (APCKER) OA APCIZED) APPLI 2000, see col. 7, line 31 to col. 11, line 7.  Y  US 5,163,131 A (ROW et al) 10 November 1992, see abstract, col. 8, line 19 to col. 12, line 33.  Y, P  US 6,233,626 Bl (SWALES et al) 15 May 2001, see col. 1, line 57 to col. 3, line 10, col. 3, line 45 to col. 6, line 13.  US 5,363,731 A (YU) 03 June 1997, see entire document.  A  US 5,802,306 A (HUNT) 01 September 1998, see entire document.  1-94  US 6,185,619 Bl (JOFFE et al) 06 February 2001, see entire document.  1-94  LUS 6,185,619 Bl (JOFFE et al) 06 February 2001, see entire document.  1-94  LUS 6,185,619 Bl (JOFFE et al) 06 February 2001, see entire document.  1-94  LUS 6,185,619 Bl (JOFFE et al) 06 February 2001, see entire document.  1-94  LUS 6,185,619 Bl (JOFFE et al) 06 February 2001, see entire document.  1-94  LUS 6,185,619 Bl (JOFFE et al) 06 February 2001, see entire document.  1-94  LUS 6,185,619 Bl (JOFFE et al) 06 February 2001, see entire document stable and the statements of the search and the statements of the s	A. CLASSIFICATION OF SUBJECT MATTER  IPC(7) : H04J 3/22; G06F 13/00; G06F 15/16  US CL : 370/352, 390, 392, 465, 469; 709/225, 229; 710/20, 62; 714/798  According to International Patent Classification (IPC) or to both national classification and IPC  B. FIELDS SEARCHED				
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  Please See Continuation Sheet  C. DOCUMENTS CONSIDERED TO BE RELEVANT  Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No.  Y US 6,046,980 A (PACKER) 04 April 2000, see col. 7, line 31 to col. 11, line 7. 1-94  Iline 33.  Y, P US 5,163,131 A (ROW et al) 10 November 1992, see abstract, col. 8, line 19 to col. 12, line 33.  Y, P US 6,233,626 B1 (SWALES et al) 15 May 2001, see col. 1, line 57 to col. 3, line 10, col. 3, line 45 to col. 6, line 13.  US 5,566,371 A (YU) 03 June 1997, see entire document. 1-94  A US 5,802,306 A (HUNT) 01 September 1998, see entire document. 1-94  A US 6,185,619 B1 (JOFFE et al) 06 February 2001, see entire document. 1-94  LUS 6,185,619 B1 (JOFFE et al) 06 February 2001, see entire document. 1-94  LUS 6,185,619 B1 (JOFFE et al) 06 February 2001, see entire document. 1-94  LUS 6,185,619 B1 (JOFFE et al) 06 February 2001, see entire document. 1-94  LUS 6,185,619 B1 (JOFFE et al) 06 February 2001, see entire document. 1-94  LUS 6,185,619 B1 (JOFFE et al) 06 February 2001, see entire document. 1-94  LUS 6,185,619 B1 (JOFFE et al) 06 February 2001, see entire document. 1-94  LUS 6,185,619 B1 (JOFFE et al) 06 February 2001, see entire document. 1-94  LUS 6,185,619 B1 (JOFFE et al) 06 February 2001, see entire document. 1-94  LUS 6,185,619 B1 (JOFFE et al) 06 February 2001, see entire document see entire document see entire document see and set of second and the peliciolist and set of second s	Minimum documentation searched (classification system followed by classification symbols)  U.S.: Please See Continuation Sheet				
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03 February 2003 (03.02.2003)  Name and mailing address of the ISA/US  Commissioner of Patents and Trademarks BOX PCT  Washington, D.C. 20231  Facsimile No. (703)305-3230  20 FEB 2003  Authorized officer  Alpus H. Hsu  Telephone No. (703)3444	t t to me menumentim there are out mot must ato		"&" document member of the same patent f	amily	
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Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230  Alpus H. Hsu Telephone No. (703)3047					
	Commissioner of Patents and Trademarks				
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INTERNATIONAL SEARCH REPORT	PC170S02/12889
Continuation of B. FIELDS SEARCHED Item 1: 370/352, 389, 390, 392, 465, 466, 467, 469; 709/201, 223, 225, 226, 227, 229; 798	710/7, 20, 29, 36, 39, 40, 62; 714/746, 748, 749,
Continuation of B. FIELDS SEARCHED Item 3:	
EAST search terms: Ethernet adj2 adapter; network, protocol, modules, (stack of IGMP	r interface), TCP, IP, (ARP or RARP), ICMP,

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